

Fig. 1

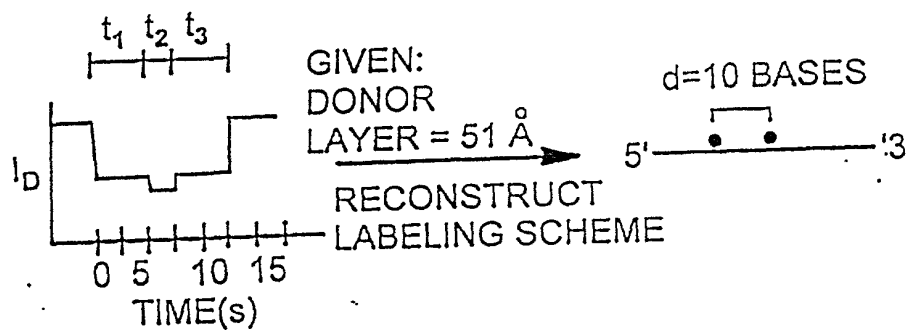


Fig. 2

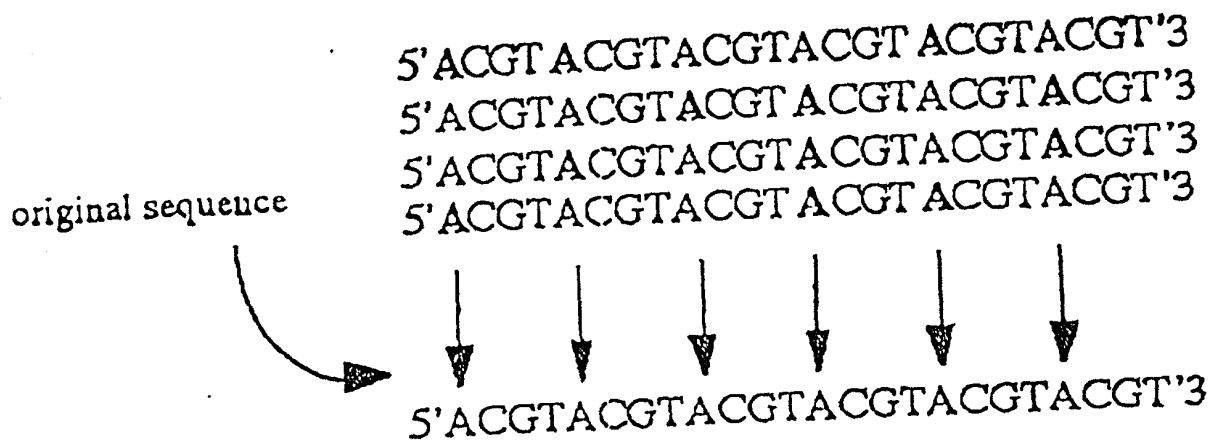


FIGURE 3

Target sequence, 5'ACGT'3

conclusions

Set AC 5'ACGT'3

AG 5'ACGT'3

AT 5'ACGT'3

CG 5'ACGT'3

CT 5'ACGT'3

GT 5'ACGT'3

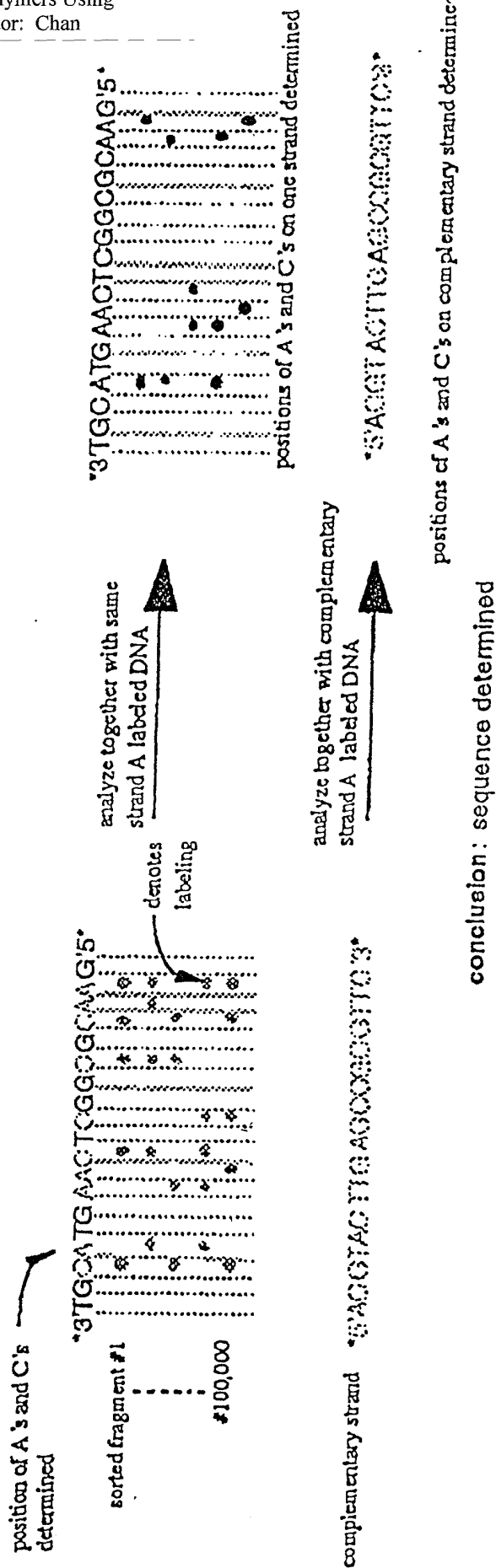
target is a 4-mcr
sequence is A(C,G,T), order
of bases following A unknown

G and T follow C,
sequence is AC(G,T)

T follows G,
sequence is ACGT

Two base labeling and analysis.

FIGURE 4



Sorted fragments are used to reconstruct the sequence of the DNA. Using population analysis, the position of the A's and C's on one strand is determined. Subsequently, the position of all the A's on the same strand are determined using the same method. In a similar fashion, the positions of the A's and C's on the complementary strand give information about the G's and T's of the first strand analyzed. The sequence can thus be reconstructed.

FIGURE 5

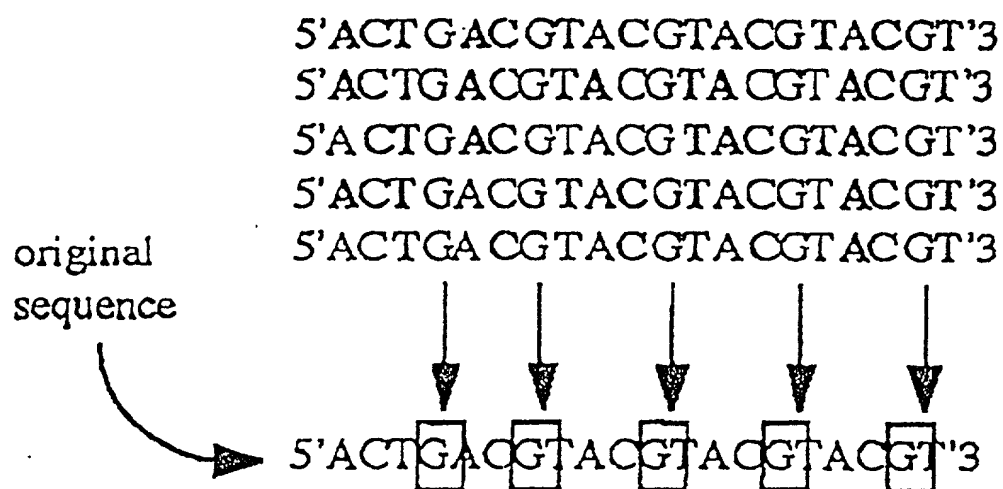
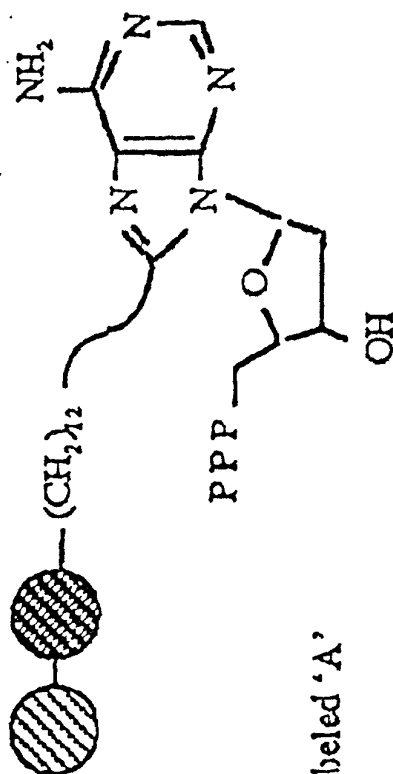


FIGURE 6

[illegible]

dual characteristic labeled 'A'

FIGURE 7

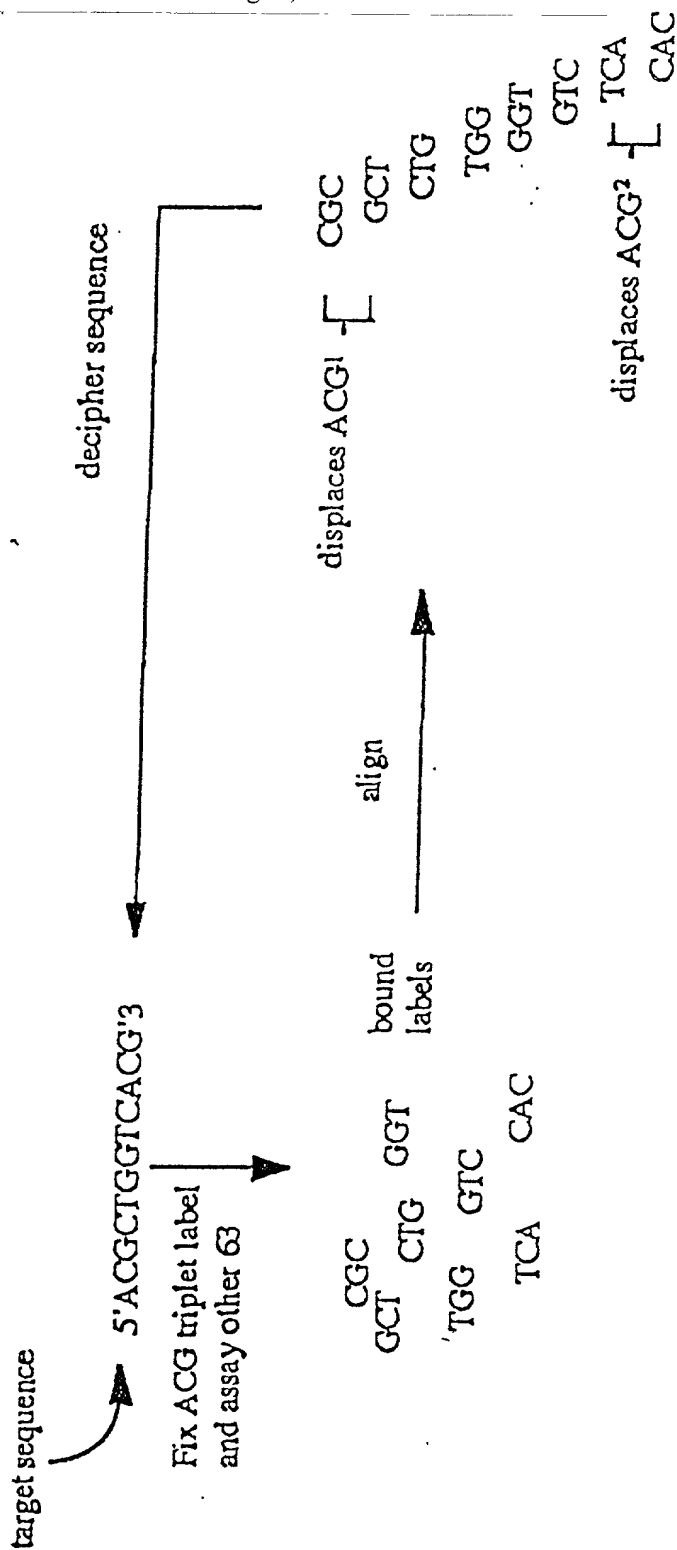


FIGURE 8

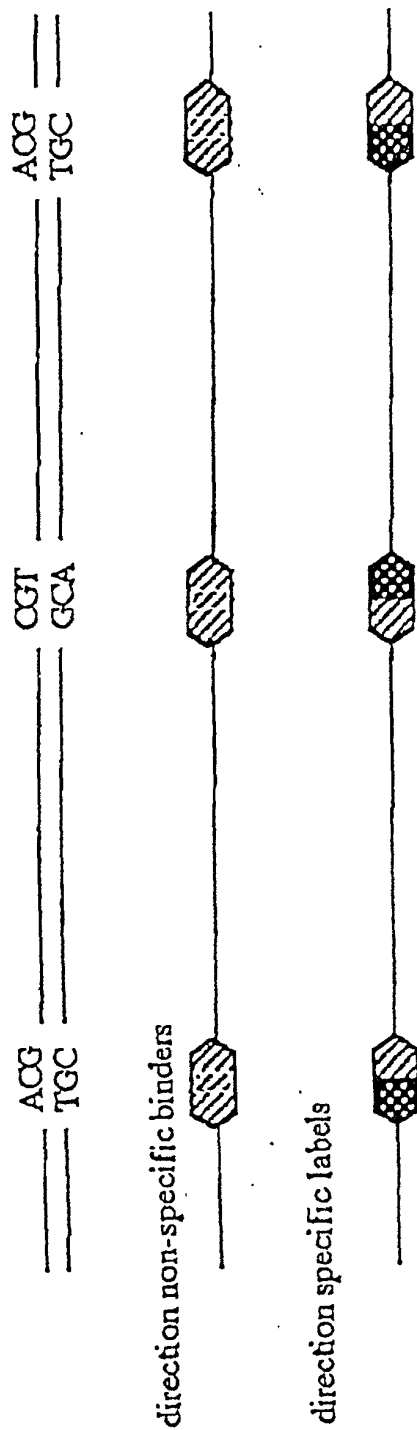
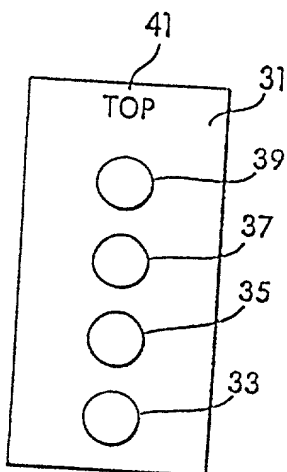
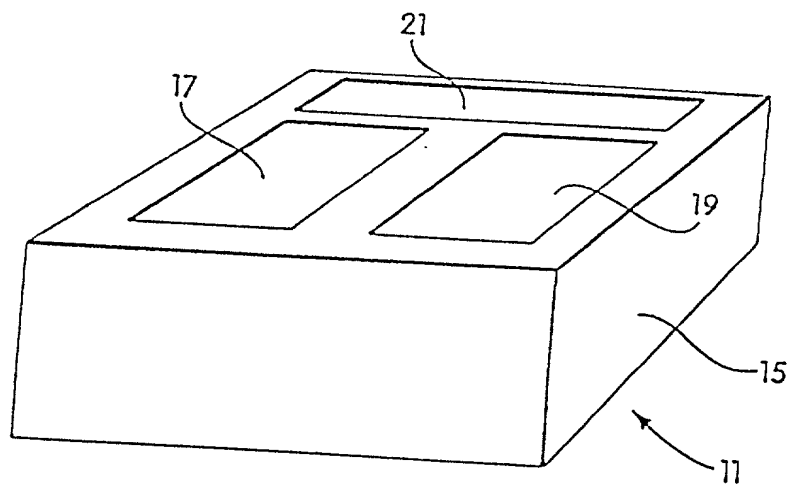
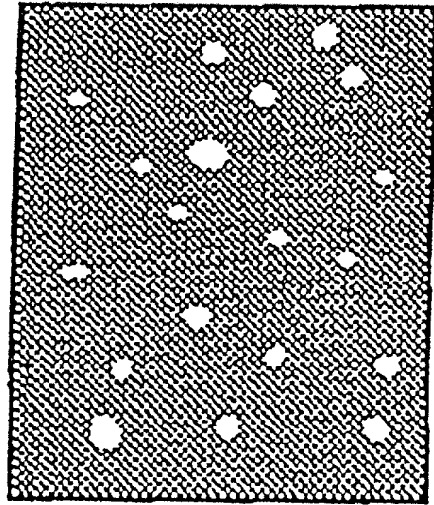
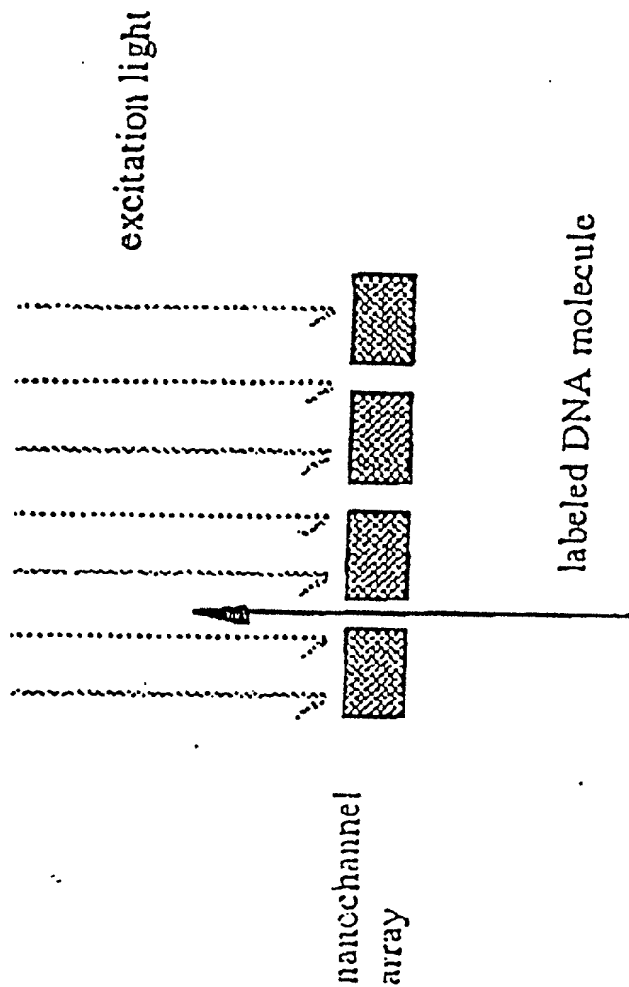


FIGURE 9

Figure 10



FOR "892260"



resulting fluorescence image

Docket No. C0989/7021(HCL)
 Title: Methods of Analyzing Polymers Using
 Ordered Label Strategies; Inventor: Chan

Example 1 and migration of DNA through nanochannel plate.

FIGURE 11

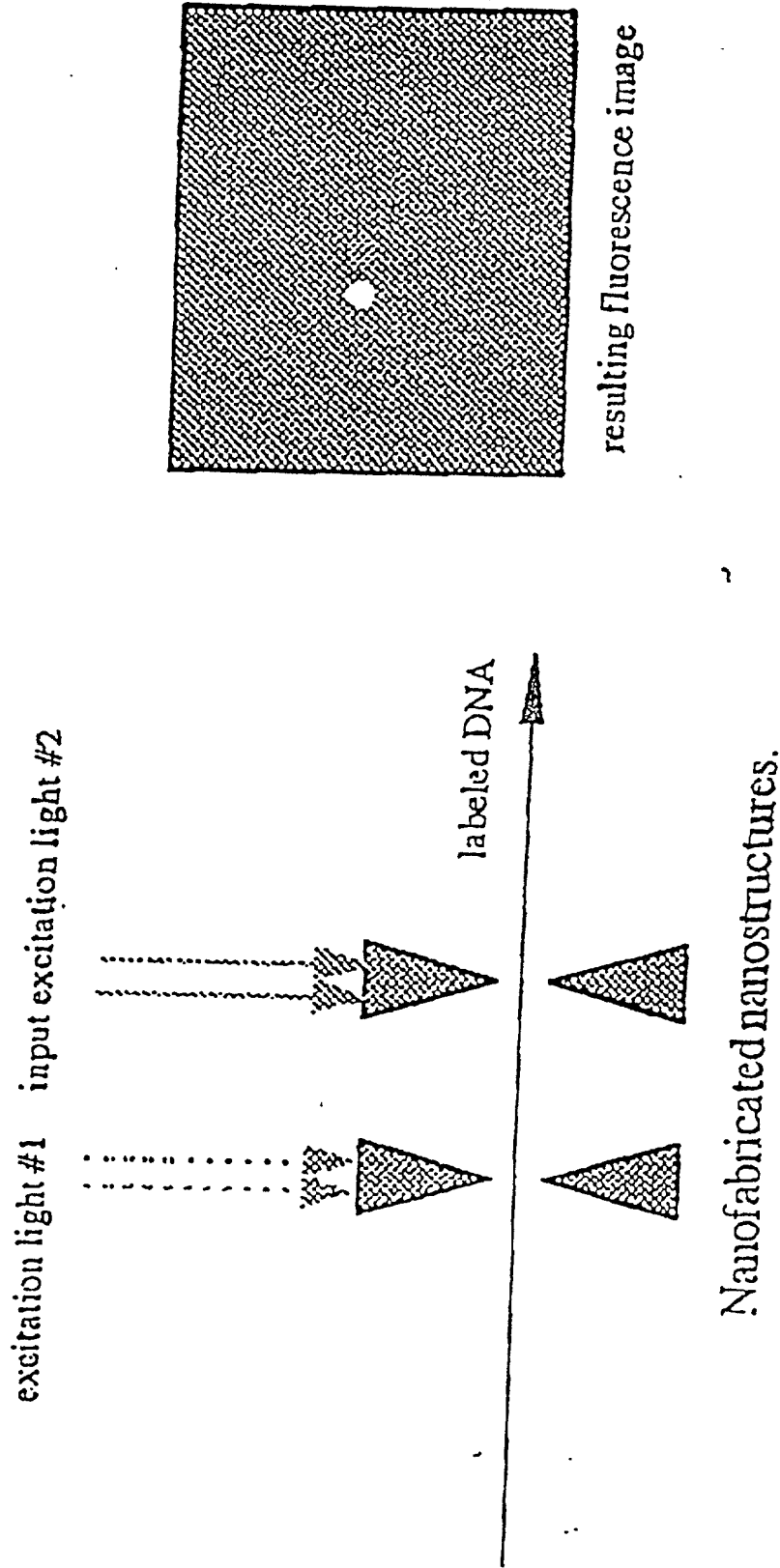
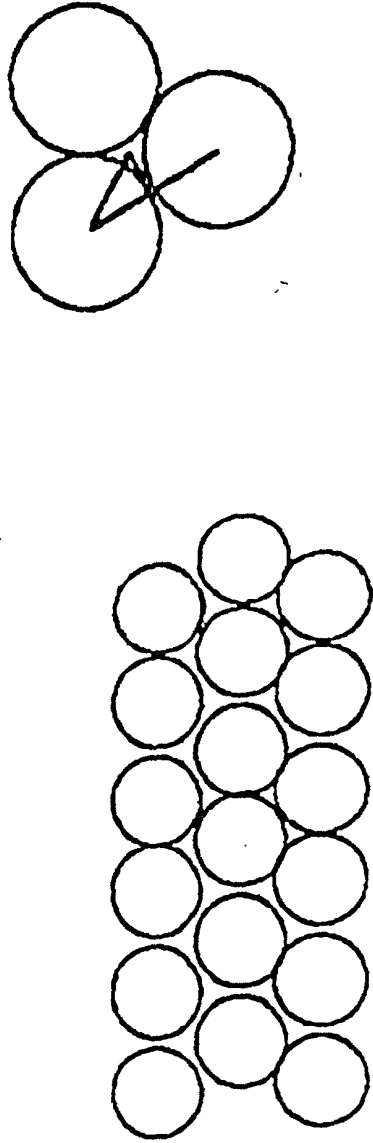


FIGURE 12



Example 3 of hexagonally packed beads as
restrictive nanostructures.

FIGURE 13